IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

: Joachim Schmitt

Serial No.

: 10/019,898

Filed

: December 28, 2001

For

: COMMUNICATIONS SYSTEM AND

COMMUNICATIONS METHOD FOR AN

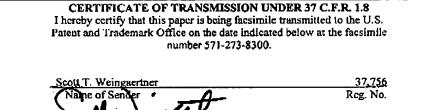
AUTOMATION UNIT WITH COMMUNICATIONS DATA STORED IN SAID AUTOMATION UNIT

Examiner

: Duyen My Doan

Group Art Unit

: 2143



Bigilature

June 12. 2006

Date of Signature

Mail Stop Appeal Brief - Patents Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

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PAGES: 28 pages (excluding accompanying papers)

APPEAL BRIEF

Sir:

Applicant hereby appeals the final rejection of the claims presently pending in the abovereferenced application and sets forth below the bases for this appeal. Enclosed with this Appeal

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Brief are: (1) the brief fee of \$330; (2) an Amendment under 37 C.F.R. § 1.116 placing claims

13-32 in better form for appeal; and (3) a petition for a two-month extension of the period for

response and the respective fee of \$450.00. The Commissioner is authorized to charge any fees

associated with the filing of this paper to Deposit Account No. 23-1703

(1) REAL PARTY IN INTEREST

The real party in interest in the above-referenced application is Siemens

Aktiengesellschaft, having a business office at Wittelsbacherplatz 2, 80333 Munich, Germany.

(2) RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any appeals or interferences related to the above-identified

patent application.

(3) STATUS OF CLAIMS

Claims 13-32 are pending in the application. This is an appeal from a final Office Action

dated October 11, 2005, which rejected all of the pending claims of the above-referenced

application.

Claims 13-14, 17-24, 26-29 and 31-32 have been rejected under 35 U.S.C. § 102(e) as

anticipated by U.S. Patent No. 5,805,442 to Crater et al. (hereinafter "Crater"). Claims 15, 16,

25 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Crater in view

of U.S. Patent No. 6,658,167 to Lee et al. ("Lee").

Appellant filed a Notice of Appeal on February 13, 2006, with the corresponding fee.

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(4) STATUS OF AMENDMENTS

Appellant has filed with this brief an amendment under C.F.R. § 1.116 placing certain

claims in better form so as to facilitate this appeal.

The proposed amendment would delete the phrase "and device information" from the

final element of each claims 13, 23 and 28; that language is redundant because the recited

"stored communication data," which immediately precedes it, is previously set forth in the claim

as including the "device information."

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The claimed invention provides a communications system and a communications method

for communicating between a data processing apparatus and an automation device, wherein the

data processing apparatus operates the automation device remotely using an application program

independent of the automation device particulars. (See Claims 13, 19, 23, 28; Application, at pp.

2-5, paragraphs [0006], [0010], [0015], [0018].) For purposes of operating the automation

device, data stored in the memory of the automation device is transferred to the data processing

apparatus. (See Claims 13, 19; Application, at p. 3, paragraph [0010].)

Previously, an application program used for operating an automation device incorporated

specific device information for the automation device it operated. (See Application, at p. 2

[0006].) Because these prior application programs directly relate to specific automation devices,

changes to the devices require changes to the corresponding application program running on

remote data processing apparatuses. (See id.)

The present invention addresses this drawback, at least in part, by decoupling the

automation device from the application program. The application claims an automation device

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PAGE 17/42 * RCVD AT 6/12/2006 4:58:31 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/14 * DNIS:2738300 * CSID:2123548113 * DURATION (mm-ss):09-50

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with a memory device that stores communication data. (See Claims 13, 23, 28; Application, at p. 4, paragraph [0015].) This communications data, stored locally on the device itself, comprises operating dialogs, communications protocols and device information specific to the particular device on which it is stored. (See Claims 13, 23, 28; Application, at pp. 2, 4, paragraphs [0006], [0015].) For operation of the automation device, the operating dialogs and device information are transferred to a data processing apparatus from the automation device and are executed by an application program running on the data processing apparatus. (See Claims 13, 23, 28; Application, at pp. 2-4, paragraphs [0006], [0010], [0015].)

In contrast to prior application programs, operating dialogs, communications protocols and device information are suited particularly to the automation device since they are provided by the automation device itself and changes to automation devices of the present invention should not require corresponding changes to application programs operating those devices remotely. (See Application, at pp. 2, 4-6, paragraphs [0006], [0015], [0018].) The application exists independently of the automation devices because information specific to a device is stored in the device itself rather than in the application program running on a remote data processing application. (See Application, at pp. 2, 4, paragraphs [0006], [0015].) As a result, a single application program may be used on a number of different automation devices with little difficulty. (See Application, at p. 4, paragraph [0015].)

Another element of the claimed invention is the use of a standard communications protocol for transferring the communications data between an automation device and the remote application program, which leads to reduced overall complexity of the application program and reduced maintenance efforts. (See Claims 13, 23, 28; Application, at pp. 2-3, paragraph [0009].) In addition to improved operation of automation devices with remote application programs, the

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elements of the claimed invention also make possible Internet-based service and support, using the device information stored in the automation device and transferred to the application program. (See Claims 13, 23, 28; Application, at pp. 4-6, paragraphs [0015], [0017], [0018].)

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 13-14, 17-24, 26-29 and 31-32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,805,442 to Crater et al. (hereinafter "Crater").

Claims 15, 16, 25 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Crater in view of U.S. Patent No. 6,658,167 to Lee et al. (hereinafter "Lee").

(7) ARGUMENT

I. CLAIMS 13-14, 17-24, 26-29 AND 31-32 STAND REJECTED UNDER 35 U.S.C. § 102(e) AS BEING ANTICIPATED BY CRATER

A. SUMMARY

The pending claims are directed to various aspects of a method and a system for operating and communicating with an automation device over a data network using a remote data processing apparatus running a browser. In rejecting these claims, the PTO has erred in several respects and has failed to meet its burden of establishing a *prima facie* basis to deny patentability of the claimed invention. The PTO has mistakenly concluded that the applied reference identically discloses or suggests each and every claim limitation of the present invention, as properly construed, rendering the pending claims anticipated under 35 U.S.C. § 102(e).

Crater, the reference cited by the PTO in its rejection of claims 13-14, 17-24, 26-29 and 31-32, does not explicitly or even implicitly disclose or suggest each and every element the claims, as properly understood. In particular, Crater fails to teach or suggest either (i) operating

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dialogs for the operation of the automation device or (ii) device information for service and support of the automation device over a data network, both limitations included in each of independent claims 13, 23 and 28.

Accordingly, Appellant respectfully requests the Board to reverse the rejection of the pending claims.

B. STATEMENT OF APPLICABLE LAW

The PTO has relied upon 35 U.S.C. § 102(e), reproduced below, to reject pending claims 13-14, 17-24, 26-29 and 31-32 in the present application.

A person shall be entitled to a patent unless – the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

"During patent examination the PTO bears the initial burden of presenting a prima facie case of unpatentability." In re Glaug, 283 F.3d 1335, 1338 (Fcd. Cir. 2002) (citing In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472 (Fed. Cir. 1984)). See also Ex parte Levy, 17 U.S.P.Q.2d 1461, 1463-64 (Bd. Pat. App. & Interf. 1990) (citation omitted). To establish a prima facie case of unpatentability based on anticipation, the PTO must cmploy a two-step analysis process. See, e.g., Ex parte Monette, Appeal No. 1996-3974, 2001 WL 1255858, at *1 (Bd. Pat. App. & Interf. 2001). First, claim terms must be properly construed. See, e.g., id. (citing Elmer v. ICC Fabricating, Inc., 67 F.3d 1571, 1574 (Fed. Cir. 1995)). Second, a determination must be made whether all the elements of the rejected claims, as properly construed, are disclosed in the prior art reference. See, e.g., id.

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If the PTO has not met its burden, a rejection under 35 U.S.C. § 102(e) cannot be sustained and the patent claims must be allowed. However, if the PTO establishes a *prima facie* case of unpatentability based on anticipation, the Applicant has the burden of coming forward with additional evidence to demonstrate that the invention is not anticipated.

The first step in determining whether a prior art reference anticipates the claims of a pending application is to properly construe the claim terms at issue. See, e.g., Monette, 2001 WL 1255858, at *1. "[W]hen interpreting a claim, words of the claim are generally given their ordinary and accustomed meaning, unless it appears from the specification or the file history that they were used differently by the inventor." Ex parte Miller, Appeal No. 1997-1238, 1997 WL 1883985, at *4 (Bd. Pat. App. & Interf. 1997) (citing Carroll Touch, Inc. v. Electro Mechanical Sys., Inc., 15 F.3d 1573, 1577 (Fed. Cir. 1993)).

Once a claim has been properly construed in the context in which the inventor presented it, it is incumbent upon the examiner to identify wherein each and every element of the claim is disclosed in a single reference. See Levy, 17 U.S.P.Q.2d at 1462 (citing In re Spada, 15 U.S.P.Q.2d 1655 (Fed. Cir. 1990); In re Bond, 910 F.2d 831, 832 (Fed. Cir. 1990); Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick, 730 F.2d 1452 (Fed. Cir. 1984)). See also Ex parte Muresan, Appeal No. 2004-1621, 2005 WL 951659, at *2 (Bd. Pat. App. & Interf. 2005) ("Having construed the claim limitations at issue, we now compare the claims to the prior art to determine if the prior art anticipates those claims." (citations omitted)).

"Anticipation under 35 U.S.C. § 102(e) requires that 'each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999) (quoting Verdegaal Bros., Inc. v. Union Oil

Co., 814 F.2d 628, 631 (Fed. Cir. 1987)). See also Muresan, 2005 WL 951659, at *2; Ex parte

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Sivers, Appeal No. 1997-0730, 1997 WL 1909600, at *2 (Bd. Pat. App. & Interf. 1997) ("It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim.") (citing In re King, 801 F.2d 1324, 1326 (Fed. Cir. 1986); Lindemann, 730 F.2d at 1458). Moreover, the PTO must consider all claim limitations when determining the patentability of an invention over the prior art. See e.g., Muresan, 2005 WL 951659, at *2 (citing In re Lowry, 32 F.3d 1579, 1582 (Fed. Cir. 1994)).

C. THE PTO HAS NOT MET ITS BURDEN OF ESTABLISHING A PRIMA FACIE CASE OF UNPATENTABILITY BASED ON ANTICIPATION

A rejection of a claim as anticipated under 35 U.S.C. § 102(e) requires that each and every claim limitation, properly construed, be identically disclosed in a single prior art reference. See, e.g., Robertson, 169 F.3d at 745. The PTO has failed to demonstrate that the cited Crater reference identically discloses each and every claim limitation of the claims 13-14, 17-24, 26-29 and 31-32, as properly construed. Neither the cited passages from Crater relied on as a basis for the rejection, nor any other passage of that reference, disclose or suggest a method or a system for operating and communicating with an automation device over a data network using a remote data processing apparatus running a browser, particularly as that subject matter is claimed.

For the following reasons, the PTO has failed to meet its burden of establishing that, under 35 U.S.C. § 102(e), each and every claim limitation of claims 13-14, 17-24, 26-29 and 31-32 of the present invention, as properly construed, is identically disclosed by Crater.

Claims 13-14, 17-24, 26-29, 31-32

The PTO has rejected claims 13-14, 17-24, 26-29 and 31-32 as allegedly being anticipated by Crater. However, for the reasons set forth below, the PTO has failed to make out

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a prima facie case of unpatentability based on anticipation with respect to claims 13-14, 17-24, 26-29 and 31-32. Accordingly, the rejections of claim 13-14, 17-24, 26-29 and 31-32 are in error and should be reversed.

The rejection of claims 13-14, 17-24, 26-29 and 31-32 as anticipated by Crater is inappropriate. Independent claim 13 is directed to a communications system for communication over a data network between an automation device and a data processing apparatus running a browser. The automation device comprises a memory arranged in the automation device and storing communications data. The communications data comprises (i) operating dialogs for the operation of the automation device and for communication with the browser in the data processing apparatus and (ii) device information for service and support of the automation device over the data network. The stored communications data are transmitted from the automation device to the data processing apparatus over the data network by way of a standard protocol. Independent claim 23, directed to a method for communicating over a network between a data processing apparatus and an automation device, and independent claim 28, directed to an automation device, each cover subject matter comparable to independent system claim 13. Crater does not identically disclose, or even suggest, each and every limitation of independent claims 13, 23 or 28, or claims 14, 17-22, 24, 26-27, 29 and 31-32 which depend from them, as properly construed.

The PTO alleges that Crater, at col. 3, lines 5-14 and col. 4, lines 5-29 and 58-60, discloses each and every limitation of claim 13 (and likewise claims 23 and 28). This text, however, is devoid of any explicit or even implicit disclosure or suggestion of each and every element of claims 13 or 28, or each and every step of claim 23, particularly those elements or steps directed to (i) operating dialogs for the operation of the automation device and for

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communication with the browser in the data processing apparatus, and (ii) device information for service and support of the automation device over the data network.

At most, Crater purports to describe a system for providing remote access to data of a controller, in which the remote access, or monitoring and display, can be done independently of the types of data coming from the controller or controlled process. In Crater, a control system is said to comprise controllers that store data and associated instructions for displaying the data in a predetermined format. ("Each controller contains computer storage means . . . for storing the relevant data and instructions associated with the data for causing a remote computer to present the data . . . in a predetermined format. . ." (Crater, at col. 3, lines 5-14 (emphasis added)).)

Remote monitoring computers running generic data-independent programs (e.g., web browsers), download control data from the controllers along with associated formatting instructions (e.g., web page formatting data) and processes the instructions to encode a user interface for displaying the incorporated control data. (See Crater, at col. 3, lines 5-26.)

Crater, however, does not disclose or suggest that a data processing apparatus remote from the automation device be made operably independent of the device particulars by transmitting those particulars from the device. To the contrary, Crater seems to require that the control be done locally, at or near the automation device, and no mention is made of the desirability of ensuring that the data processing apparatus contain information for operating the automation device. The remote monitoring computer in Crater is not configured to operate any automation device, nor provide service and support of any automation device. It transmits no data to the controller or to any other device. Nothing in Crater suggests that the operation of automation devices is performed by a remotely located data processing apparatus having

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communications data comprising operating dialogs for operating an automation device or device information for support and service.

The PTO relies on text from Crater, at col. 4, lines 20-29, that purports merely to describe the operation of a client-server model of information exchange and a standard communications protocol commonly used in transmissions over a data network. The system in Crater apparently relates to routing of messages between client and server by arranging messages into data packets, each of which receives a destination address according to a consistent protocol such as TCP/IP. (See Crater, at col. 4, lines 18-29.) The PTO compares the server and client of Crater to the automation device and data processing unit of the pending application, respectively. (See Final Office Action, dated 10/11/2005, at pp. 2-3, 6-7.) The PTO also compares the communications protocol and destination address (along with other routing information) transmitted from the server to the client of Crater to the operating dialogs and device information of the pending application, respectively. (See id.) But nowhere does the PTO establish, as it must, that the standard use of a communications protocol (e.g., TCP/IP) in Crater identically discloses, or even suggests, an operating dialog for the operation of an automation device. Likewise, the PTO has not carried its burden of demonstrating that the routing information (e.g., destination address) transmitted to a client in Crater teaches or suggests device information used to service and support an automation device over a network.

The PTO incorrectly contends that the communications protocol of Crater discloses the operating dialogs recited in the pending claims. But the terms "operating dialogs" and "communications protocols" are distinct concepts (as the pending application also makes clear) while the claim language is directed to communications data comprising operating dialogs. (See Application, at pp. 2-5, paragraphs [0006], [0007], [0010], [0015], [0018].)

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Moreover, the language of the claims distinguishes the communications data comprising operating dialogs, device information and communications protocols from a standard communications protocol used merely to transmit data across a network, as is the case with the protocol described in Crater. Claim 13, amended as proposed, recites that "the stored communications data are transmitted from the automation device to the data processing apparatus over the data network by way of a standard protocol" while previously reciting "communications data comprising operating dialogs . . . and device information." The two terms may not be construed to have to the same meaning.

Reference to the application sheds additional light on the involved claim terminology. The application explains the distinction between communication data from a standard communications protocol of the type purportedly described in Crater. For example, paragraph [0009] of the application states that the "complexity of the application program for communicating with the automation device can be kept to a minimum by virtue of the communications program being an Internet browser, and by virtue of a standard protocol being provided for transferring the communications data between the automation device and the communications program." Again, in paragraph [0015], the application states: "[T]hese operating dialogs and communications protocols are executed and displayed by the application program 5, for example an Internet browser or a similar program. For the data interchange via the data link 3, a standard protocol, such as TCP . . . or IP . . . , is used, in particular." Clearly, a standard communications protocol used for the transmission of data over a network (e.g., TCP/IP), as purportedly set forth in Crater and described by the PTO in its rejection of the pending claims, as well as claimed in claim 13, amended as proposed ("the stored communications data are transmitted . . . by way of a standard protocol"), represents a different

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concept than the communications data (operating dialogs and device information) separately claimed and described throughout the application.

This distinction is important for several reasons. The application explains that the "use of a standard communications protocol results in maintenance efforts being further reduced," making possible Internet-based service and support. (Application, at p. 4, paragraph [0015].) While the standard communications protocol is used to transmit data across a network between an apparatus and an automation device, that data comprising operating dialogs and device information, the operating dialogs are used for the operation of the automation device and the device information is used for service and support of the automation device. The PTO's argument that TCP/IP is used to operate a device, or to provide service and support to a device, is plainly erroncous.

Furthermore, claim 13 requires the *transmission* of the operating dialogs and device information from the automation device to the data processing apparatus by way of a standard protocol. The PTO's argument, in effect that the communications protocol of Crater (as allegedly disclosing the operating dialogs) is transmitted across a network by way of that same communications protocol, defies logic. TCP/IP is a protocol for describing how information is to be transmitted; it is not itself transmittable data and certainly not described as such by Crater.

The operating dialogs of the present invention comprise actual data transmitted across a network.

The operating dialogs and the device information are used, not to permit mere communication over a network (as done with standard communications protocols and routing information), but to provide the device particulars of a given device so that a data processing apparatus communicated to over a network will be equipped to operate, support and service it. In other words, operating dialogs may describe how the device from which it originates is to be

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operated by a remote apparatus. By transferring operating dialogs and information specific to a particular device from the device itself to a data processing apparatus running a device-independent application program for operating the device, new application programs need not be installed each time a device is replaced or updated. (See id.) Changes in the device are therefore independent of the application program so that corresponding changes in the application program are not necessary. (See id.) The operating dialogs and device information are always suitable for the automation device, since they are provided by the automation device itself, which is also advantageous particularly when device versions are changed. (See Application, at p. 4, paragraph [0015].) In addition, matching and/or changing over an application program to a new automation device is facilitated. (See id.)

Contrary to the PTO's assertion that the communications protocol and routing information are used, in Crater, at col. 4, lines 20-29, 60-67 and col. 5, lines 1-12, to "operate" the server, there is no indication that they are used for any purpose other than maintaining an open line of communication for clients to access information stored remotely on servers.

Clearly, this does not disclose the limitations of the claim language, which call for transmission of information particular to a specific device for operating that device remotely with a device-independent application program. Claim 13 recites "operating dialogs for the operation of the automation device," while claim 19 recites "communications data stored in the memory" and "transferred... for operating the automation device." (emphasis added) A data processing apparatus, as recited, need not be configured to operate the device until it receives operating dialogs from the device instructing it on the device particulars. The communications protocol described in Crater, far from disclosing the claimed invention, does not permit a client to operate

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a specific server based on that server's particulars, nor does it comprise information that is itself transmitted across the network.

The PTO contends that the routing information (e.g., destination address) transmitted across the network in Crater discloses device information used to *service and support* an automation device over a network. (See Final Office Action, dated 10/11/2005, at pp. 2, 6-7.)

The routing information of Crater, such as the destination address, however, merely provides for a location where a data packet will be transmitted and does not provide for information particular to the device at that destination, whereby the information is used for *service and support* of that device. (See Crater, at col. 4, lines 5-29.)

The PTO implies, incorrectly, that the "servicing" of client requests by the server in Crater is a disclosure of the "service and support" limitation of the claim language of the pending application. (See Final Office Action, dated 10/11/2005, at pp. 6-7.) First, having already compared the server of Crater to the automation device of the application, the PTO cannot also argue that the servicing of client requests by the server discloses service and support of an automation device. If, as argued by the PTO, the Crater server identically discloses the automation device, which it does not, then the PTO has also taken the position that the server services itself. But this line of reasoning defies logic. Similarly, the use of the term "servicing" to describe a server handling client requests clearly does not teach or suggest the service and support concept described throughout the application and pending claims.

The PTO, therefore, has not carried its significant burden of establishing that each and every limitation of the invention set forth in independent system claim 13, independent method claim 23 and independent device claim 28 is identically disclosed by Crater, as required to sustain the rejection. Because Crater altogether fails to identically

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disclose or even suggest all the elements or steps of the independent claims, and therefore the claims that depend from them, pending claims 13-14, 17-24, 26-29 and 31-32 are respectfully submitted to be patentable.

Accordingly, for the reasons set forth above, the PTO has failed to establish a *prima facie* case that claims 13, 23 and 28, as well as those claims that depend from them (claims 14, 17-22, 24, 26-27, 29 and 31-32), are anticipated by Crater.

II. CLAIMS 15, 16, 25 AND 30 STAND REJECTED UNDER 35 U.S.C. § 103(a) AS BEING UNPATENTABLE OVER CRATER IN VIEW OF LEE

A. SUMMARY

The present appeal arises, in part, out of the PTO's crroneous rejection of pending claims 15, 16, 25 and 30, directed to communications data stored in memory comprising data in compressed form, based upon art that (1) whether taken individually or collectively, fails to disclose or suggest the present invention as claimed, and (2) cannot be properly be combined. Indeed, the PTO has admitted that the primary reference, Crater, fails to disclose that "the communications data stored in memory comprise data in compressed form." (Final Office Action, dated 10/11/2005, at p. 5.) Additionally, the PTO has not demonstrated, as it must, that the secondary reference, Lee, which is in a field distinct from and unrelated to that of the present invention, is analogous to the present invention. The PTO also has failed to demonstrate an incentive to combine a primary applied reference with a secondary reference.

In rejecting claims 15, 16, 25 and 30, the PTO, thus, has erred in several respects and has failed to make out a *prima facie* case of nonobviousness. Accordingly, pending claims 15, 16, 25 and 30 are non-obvious. Appellant respectfully requests the Board to reverse the rejection of the pending claims.

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B. STATEMENT OF APPLICABLE LAW

The PTO has relied upon 35 U.S.C. § 103(a), which is reproduced below, to reject all of the pending claims in the present application.

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35 U.S.C. § 103(a).

The basic test for determining obviousness under 35 U.S.C. § 103 was set forth by the Supreme Court in <u>Graham</u> v. <u>John Deere</u>.

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquires may have relevancy. . .

Graham v. John Deere, 383 U.S. 1, 148 U.S.P.Q. 459 (1966).

The burden is on the PTO to establish a *prima facte* showing of obviousness. In refritch, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). A *prima facte* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)(emphasis added)(citations omitted). The appropriate test is "whether the claimed invention, considered as a whole, would have been obvious or nonobvious." Jones v. Hardy, 727 F.2d 1524, 1529,

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220 U.S.P.Q. 1021, 1025 (Fed. Cir. 1984) (citations omitted). "Failure to consider the claimed invention as a whole is an error of law." <u>Id.</u> (citations omitted). Morcover, in seeking to establish a *prima facie* case of obviousness, the PTO may not rely on knowledge of Applicant's invention to "pick and choose" among disclosures in the prior art to deprecate the claimed invention. <u>In re Fine</u>, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

To establish a *prima facie* case of obviousness, the PTO must demonstrate some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the references' teachings. <u>In re Vaeck</u>, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Additionally, the teaching or suggestion to make the claimed combination must be found in the prior art and not based on the Applicant's disclosure. *Id.* If the PTO establishes a *prima facie* case of obviousness, the Applicant has the burden of coming forward with additional evidence to demonstrate that the invention is non-obvious.

C. THE PTO HAS NOT MET ITS BURDEN OF ESTABLISHING A PRIMA FACIE CASE OF UNPATENTABILITY BASED ON ANTICIPATION

The PTO has rejected the pending claims as obvious under 35 U.S.C. § 103(a), alleging that all of the elements of pending claims 15, 16, 25 and 30 are disclosed by a combination of Crater and Lee. However, each of these claims include elements that are not taught or suggested by either of the cited references, whether alone or in combination. The PTO has failed to meet its burden of establishing a *prima facie* case of obviousness because (1) Crater does not disclose (i) operating dialogs for the operation of the automation device, (ii) device information for service and support of the automation device over a data network, or (iii) communications data stored in memory comprising data in compressed form, and (2) Lee is not pertinent art, cannot be

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properly combined with Crater, and does not disclose the subject matter admittedly missing from Crater, whether alone or in combination with that reference.

The primary reference relied upon to support the rejection, Crater, as already discussed above, does not disclose communications data comprising operating dialogs for the operation of the automation device and for communication with the browser in the data processing application, and device information for service and support of the automation device over the data network, as claimed in claims 13, 23 and 28 and incorporated into claims 15, 16, 25 and 30, which depend from them. In addition, the PTO acknowledges that Crater fails to disclose the communications data in compressed form. (See Final Office Action, dated 10/11/2005, at p. 5.)

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." In re Linter, 458 F.2d 1013, 1016, 173 U.S.P.Q. 560, 562 (CCPA 1972). Here, the teachings of Crater and Lee would not have been sufficient to enable one of ordinary skill in the art to apply the necessary substitutions, combinations, and modifications to the references so as to make the claimed invention.

The PTO has failed to demonstrate a suggestion or a motivation to combine the cited references. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Kotzab, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000) ("The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem

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to be solved as a whole would have suggested to those of ordinary skill in the art"). Here, there is no express or implied motivation to search for art like Lee or combine it with Crater. Even assuming, without conceding that, the Crater reference has any bearing on the problem being solved, the PTO has acknowledged that this reference failed to recognize a central problem identified and solved by the Applicant. No other source for the identification of the problems addressed by the Applicant, or for any other motivation to look for or combine references outside the field automation drive technology and industrial automation, has been identified by the PTO.

Lee bears no relation to the field of automation drive technology, or even to industrial automation, but is directed to a different purpose than is the claimed invention. A worker in the field of automation drive technology in need of a solution would have no motivation to look to Lee for guidance.

Lee is not reasonably pertinent to the problem with which Applicant was concerned. As described above, Applicant is concerned, among other things, with the operation of an automation device by a remote data processing apparatus running an application program that operating dialogs and device information from the automation device itself rather than storing that data within the application program. As explained in the application, compression of this data (operating dialogs and device information) further improves automation drive technology by reducing memory requirements. (See Application, at pp. 2, 4, paragraphs [0008], [0015].) The remote operation of automation devices using compressed communications data transferred from such devices is a non-trivial, industry-specific problem.

The U.S. Court of Appeals for the Federal Circuit ("the Federal Circuit") has held that "[i]n order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably

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F.2d 1443, 1447, 24 U.S.P.Q.2d 1443 (Fcd. Cir. 1992). As the Federal Circuit has also held, if the reference is from a different field from the inventor's endeavor, it must be one which "because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." In re Clay, 966 F.2d 656, 660, 23 U.S.P.Q.2d 1058 (Fed. Cir. 1992). If the prior art "is directed to a different purpose [than the claimed invention], the inventor would accordingly have had less motivation or occasion to consider it."

But for the present invention, a worker in the field of automation drive technology or industrial automation would not have looked to a patent from another field that was directed to "client/server network technology" for guidance in developing a system for generating compressed "communications data comprising operating dialogs for the operation of the automation device and for communication with the browser in the data processing apparatus, and device information for service and support of the automation device over the network." This is particularly true where, as here, the PTO has not identified any actual motivation in the relevant art, without relying impermissibly on hindsight informed by the claimed invention, to look to an unrelated field. For these reasons, under the controlling legal precedent, and in the absence of any suggestion in the art, Lee cannot properly be combined with Crater.

Far from supplying the disclosure admitted to be missing from Crater, Lee (even if it could be properly combined with Crater, which it cannot) does not provide any disclosure, much less an enabling disclosure, of the compression of "communications data comprising operating dialogs for the operation of the automation device and for communication with the browser in the data processing apparatus, and device information for service and support of the automation

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device over the network," and absolutely fails to provide an enabling disclosure of how one

could practice such aspects of the claimed invention.

Accordingly, for these references, the PTO has failed to establish a prima facie case of

obviousness.

(8) CONCLUSION

Applicant respectfully submits that, for the reasons given above, (i) Claims 13-14, 17-24,

26-29 and 31-32 were improperly rejected as anticipated and are allowable over the cited art, and

(ii) Claims 15, 16, 25 and 30 were improperly rejected as obvious and arc allowable over the

cited art. The PTO has erred. Applicant accordingly requests reversal of the rejections.

Dated: June 12, 2006

Respectfully submitted.

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APPENDIX A

APPENDIX OF CLAIMS

13. A communications system for communication over a data network comprising: a data processing apparatus running a browser; and an automation device in communication with the data processing apparatus over the data

an automation device in communication with the data processing apparatus over the data network, the automation device comprising:

a memory arranged in the automation device and storing communications data, the communications data comprising:

operating dialogs for the operation of the automation device and for communication with the browser in the data processing apparatus, and device information for service and support of the automation device over the data network;

whereby the stored communications data are transmitted from the automation device to the data processing apparatus over the data network by way of a standard protocol.

- 14. The communications system according to claim 13, wherein the operating dialogs comprise Java objects.
- 15. The communications system according to claim 13, wherein the communications data stored in the memory comprise data in compressed form.
- 16. The communications system according to claim 14, wherein the communications data stored in memory comprise data in compressed form.
- 17. The communications system according to claim 13, wherein the data network comprises an Internet.
- 18. The communications system according to claim 13, wherein the browser comprises an Internet browser.

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19. The communications system according to claim 13, wherein the communications data stored

in the memory are transferred from the automation device to the data processing apparatus for

operating the automation device.

20. The communications system according to claim 13, wherein the communications data

transferred from the automation device to the data processing apparatus are executed in the

browser and arc displayed by the data processing apparatus.

21. The communications system according to claim 13, further comprising at least a second data

processing apparatus having a browser and in communication with the automation device over

the data network, and wherein the stored communications data and device information are

transmitted from the automation device to the second data processor over the data network by

way of a standard protocol.

22. The communications system according to claim 21, wherein the second data processing

apparatus is in communication with the automation device via the Internet.

23. A method for communications over a data network between a data processing apparatus

having a browser and an automation device, the method comprising the steps of:

storing, in a memory arranged in the automation device, communications data for

communicating with the browser, the communications data comprising

operating dialogs for the operation of the automation device and communications

with the browser in the data processing apparatus, and

device information for service and support of the automation device over the data

network; and

transmitting the stored communications data from the automation device to the data

processor over the data network by way of a standard protocol.

24. The method according to claim 23, wherein the communications data comprises Java

objects.

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25. The method according to claim 23, wherein the communications data stored in the memory

comprises data in compressed form.

26. The method according to claim 23, wherein the browser comprises an Internet browser.

27. The method according to claim 23, wherein the communications data transferred from the

automation device to the data processing apparatus are executed in the browser and are displayed

by the data processing apparatus.

28. An automation device for communications over a data network with at least one data

processing apparatus having a browser, the automation device comprising:

a memory arranged in the automation device and storing communications data

comprising:

operating dialogs for the operation of the automation device and communication

with the browser in the data processing apparatus, and

device information for service and support of the automation device over the data

network,

whereby the stored communications data are transmitted from the automation device to the data

processing apparatus over the data network by way of a standard protocol.

29. The automation device according to claim 28, wherein the communications data comprises

Java objects.

30. The automation device according to claim 28, wherein the communications data comprises

data stored in the memory in compressed form.

The automation device according to claim 28, wherein the data network comprises an

Internet.

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32. The automation device according to claim 28, wherein the at least one data processing apparatus comprises a plurality of apparatuses and the stored communications data and device information are transmitted from the automation device to the plurality of data processing apparatuses over the data network.

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APPENDIX B

APPENDIX OF EVIDENCE

None.

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APPENDIX C

APPENDIX OF RELATED PROCEEDINGS

None.